

BEFORE  
THE PUBLIC SERVICE COMMISSION OF  
SOUTH CAROLINA

DOCKET NO. 2003-128-E - ORDER NO. 2003-457

DECEMBER 31, 2003

IN RE:	Application of South Carolina Electric & Gas	)	ORDER GRANTING
	Company for a Certificate of Environmental	)	CERTIFICATE ✓
	Compatibility and Public Convenience and	)	
	Necessity for the Construction and Operation	)	
	of the Yemassee Transmission Line.	)	

**I. INTRODUCTION**

This matter comes before the Public Service Commission of South Carolina (the Commission) on the Application of South Carolina Electric & Gas Company (SCE&G or the Company) for a Certificate of Environmental Compatibility and Public Convenience and Necessity for the construction and operation of a new 230kV transmission line (the Yemassee 230kV line). The Yemassee 230kV line will originate at the SCE&G Yemassee Substation near Yemassee, South Carolina, and will connect to the Santee Cooper (SCPSA) Yemassee Substation, also near Yemassee, South Carolina. The proposed line will be built entirely on existing SCE&G right-of-way and SCPSA property, according to the Company. The Application is filed pursuant to the provisions of S.C. Code Ann. Section 58-33-10, et seq. (1976 and Supp. 2002) (the Siting Act). Because the record of this proceeding establishes that SCE&G has satisfied the statutory requirements for the relief it seeks, the Commission will herein approve the Application and issue the requested Certificate.

Prior to the submission of its Application, SCE&G published notice of its intent to apply for a Certificate under the Siting Act, as the provisions of Section 58-33-120(3) require. In addition, the Application included certification that SCE&G had served a copy of the Application on those governmental officials and such other persons as Section 58-33-120(2) of the Siting Act requires.

Upon receipt of SCE&G's Application, the Commission's Executive Director required the Company to publish a prepared Notice of Filing and Hearing which described the nature of the Application and advised all interested parties of the manner in which they might intervene or otherwise participate in the proceeding. SCE&G submitted an affidavit which demonstrated compliance with the Executive Director's instructions. No Protests or Petitions to Intervene were received. (Statutory parties are the Department of Health and Environmental Control (DHEC), the Department of Natural Resources (DNR), and the Department of Parks, Recreation, and Tourism (PRT)(the statutory intervenors)). See S.C. Code Ann. Section 58-33-140 (1)(b)(Supp. 2002).

On June 26, 2003, at 10:30 a.m., in accordance with Section 58-33-130 of the Siting Act and with the Commission's Rules of Practice and Procedure, the Commission conducted an evidentiary hearing in this proceeding. SCE&G was represented by Catherine D. Taylor, Esq., and Dahli Myers, Esq. None of the statutory intervenors appeared. The Commission Staff was represented by F. David Butler, General Counsel.

SCE&G presented the testimony of Hubert C. Young, III and Dwight M. Hollifield. The Commission Staff presented no witnesses.

In addition to the testimony of these two witnesses and four (4) hearing exhibits, the record of this proceeding includes SCE&G's Application, the various notices, and pleadings.

## **II. SUMMARY OF TESTIMONY**

Hubert C. Young, III

Hubert C. Young, III, Manager of Transmission Planning for SCE&G, testified. Young stated that the new proposed Yemassee 230kV line will be 2.86 miles in length and will be built entirely on existing SCE&G right-of-way and Santee Cooper property. Young at 3. Young discussed the need and necessity for the construction of a new transmission line, which originates at the SCE&G Yemassee Substation, near Yemassee, South Carolina, and connects to the Santee Cooper (SCPSA) Yemassee Substation, also near Yemassee, South Carolina. Young testified that SCE&G's existing Yemassee-Fairfax 115kV line originates at SCE&G's Yemassee Substation and passes within 200 feet of Santee Cooper's Substation where it crosses Santee Cooper property. This is the existing transmission corridor where the proposed line will be constructed. Young also noted that SCE&G's existing Yemassee-Canadys 230kV line originates at SCE&G's Yemassee Substation and parallels, on this same transmission corridor, the Yemassee-Fairfax 115kV line for about half the distance to the Santee Cooper substation. According to Young, SCE&G decided to rebuild segments of these two lines and use this existing right-of-way rather than acquire new right-of-way for this proposed line. Young at 2-3.

Young testified that SCE&G subscribes to the Planning Standards and Guides established by the North American Electric Reliability Council (NERC) and SCE&G's

Long Term Planning Criteria. In accordance with SCE&G's criteria, the SCE&G Transmission System is designed so that during any of certain specific listed contingencies, only short-time overloads, low voltages, and local loss of load will occur. Young at 3-4.

Company witness Young also described the need for the new transmission line. According to Young the proposed line is needed to improve reliability issues in the Yemassee/Hardeeville area of the SCE&G transmission system and to interconnect the SCE&G Jasper County Generation Project to the SCE&G transmission grid. To address these two needs, SCE&G and Santee Cooper worked together to connect the two systems via intertie solutions. SCE&G agreed to construct two transmission interties at the Jasper County Generation Project and the proposed Yemassee (SCE&G)-Yemassee (Santee Cooper) 230kV transmission intertie, which is the line presented in the Company's filing. By utilizing this three-intertie solution, reliability issues in the area are resolved, and the interconnection of the Jasper County Generation Project is much less costly, according to Young. Young at 5-6.

Young noted that without an agreement between SCE&G and Santee Cooper on this solution, SCE&G would have to construct a new 80 mile transmission line on new right-of-way from the Jasper County Generation site to the Charleston area. The combination of the three new interties (including the proposed transmission line) provide additional power transfer capability for reliability and economic purposes between SCE&G and Santee Cooper, according to Young, and also allow the two systems to support each other during system contingencies. Young summarized this portion of his

testimony by stating that the proposed Yemassee (SCE&G)-Yemassee (SCPSA) transmission line is one intertie of a three-intertie solution that is the best and least cost solution for resolving reliability issues in the Yemassee/Hardeeville area and interconnecting the Jasper County Generation Project to the existing grid. Id.

A joint study was performed with SCE&G, Southern Company, Santee Cooper, Georgia Transmission Company, and the Municipal Electric Association of Georgia (MEAG) to analyze the future capability and expected performance of the integrated transmission system in the Yemassee/Hardeeville/Savannah, GA area, also according to Young. All of the participants in this joint study own transmission facilities in this area, either in South Carolina or Georgia. The study included the proposed transmission line in this case, and was filed with the Commission as part of the Company's Application as Application Exhibit B. Finally, Young compared the cost of the proposed transmission line with the alternative 80 mile transmission line from the Jasper County Generation Project site to the Charleston, SC area. The cost of the line as proposed by SCE&G is \$2,250,000, and the cost of the 80 mile alternative is \$75,000,000. The line as proposed by SCE&G is scheduled to be in service in January 2004 if approved by the Commission. Young at 6-7.

Dwight M. Hollifield

Dwight M. Hollifield, General Manager of the Facilities Planning and Siting Department for Framatome ANP, also testified. Hollifield discussed line siting issues that SCE&G, in collaboration with Framatome ANP, considered when choosing the route for the Yemassee 230kV line. Hollifield was the author and sponsor of certain reports which

detail the research and studies conducted regarding the environmental, land use, cultural resource, and visual effects of the future Yemassee 230kV line. Said reports were filed with the Company's Application as Exhibit A.

Hollifield pointed out what he considered to be several important land-use and environmental related benefits:

- 1) No new right-of-way will be required; therefore, the proposed line will have no effects on present or future land use in the area;
- 2) By placing the proposed line on an existing, cleared SCE&G right-of-way, all environmental effects associated with the projects will be short-term and minimal;
- 3) Because the proposed line will not likely cause a net increase in the number of transmission line structures that currently support the segments of the two lines to be upgraded, associated visual effects will be negligible. In fact, according to Hollifield, the replacement of wooden H-Frame structures with clean silhouette, tubular steel poles spaced farther apart will likely effect a minor improvement in overall visual effects;
- 4) The replacement of existing wooden structures with tubular steel poles over the 2.86 mile length of the Yemassee 230kV Line will extend the service life of structures on segments of two existing lines from less than 40 years to 75 years or more while reducing maintenance requirements. Hollifield at 3.

Hollifield testified that, based on his experience associated with conducting comparative evaluations of alternate transmission line routes through the application of quantified environmental, land use, cultural resource, and visual resource factors, any

other route than that proposed for the proposed line on new right-of-way would be significantly inferior to the route SCE&G has selected along its existing right-of-way. Further, because the proposed line will be built entirely within SCE&G's existing transmission line right-of-way, there will be no measurable short or long-term adverse environmental impacts. Hollifield noted that a biological survey was conducted and it concluded that two wetlands will be crossed by the proposed line, but no impacts to them will occur because no additional tree clearing will be required within the existing right-of-way and existing access roads are adequate to accommodate line construction. The biological survey also concluded that no rare, threatened, or endangered species will be affected by the proposed line. Hollifield at 3-4.

Two archaeological sites and two isolated finds were found in the future line's right-of-way. Only one of the sites appeared to have the potential for intact artifacts. The Company, however, will display its location on all construction drawings for the proposed line, mark the boundaries of the site in the field, and completely avoid all surface and subsurface disturbance to the site, according to Hollifield. In addition, the Company will agree to implement all conditions set out by the State Historic Preservation Office and the South Carolina Department of Natural Resources. See below. Hollifield at 4-5.

On cross-examination, Hollifield was asked about two letters from two agencies of the State of South Carolina. The first letter was from Valerie Marcil, Staff Archaeologist, State Historic Preservation Office (Hearing Exhibit 3). Among other matters, Ms. Marcil discussed the archaeological site with potential for intact artifacts as

noted above, and stated that the site is eligible for the National Register of Historic Places. Ms. Marcil noted the project as proposed has the potential to result in an adverse effect. However, Ms. Marcil stated that her office would agree to “no adverse effect” if SCE&G can meet several conditions:

- 1) The site will be marked in the field and cordoned off prior to construction activities;
- 2) The site will be spanned so that it receives no below-ground disturbance from the placement of power poles;
- 3) The site will be cleared by hand with no grubbing or other below grade disturbance;
- 4) The site will be surveyed by a professional surveyor in coordination with the consulting archaeologist and will be marked and annotated on all maintenance maps to help insure that it is appropriately protected during all future maintenance activities; and
- 5) One or more permanent signs at the location of the site should alert maintenance crew to the “sensitivity of the area” and to check maintenance maps for instructions.

Hollifield testified that SCE&G was agreeable to implementing these conditions.

The second letter was from Robert E. Duncan, Environmental Programs Director, South Carolina Department of Natural Resources (Hearing Exhibit 4). Duncan noted that the project will cross two emergent wetlands, although the existing transmission lines have previously impacted these wetlands. Duncan stated in his letter that although the



Department believed that the proposed project may have adverse impact to natural resources, the Department would offer no objections provided that project impacts are minimized by incorporating the following recommendations into project plans:

1) Prior to beginning any land disturbing activity, appropriate erosion control measures, such as silt fences, silt barriers, or other devices, must be placed between the disturbed area and the affected waterway or wetland; and maintained in a functioning capacity until the area is permanently stabilized;

2) All necessary measures must be taken to prevent oil, tar, trash and other pollutants from entering the adjacent offsite areas;

3) Once the project is initiated, it must be carried to completion in an expeditious manner in order to minimize the period of disturbance to the environment. Upon project completion, all disturbed areas must be permanently stabilized with vegetative cover, riprap or other erosion control methods as appropriate.

4) Construction activities must avoid to the greatest extent practicable, encroachment into any wetland areas outside the proposed transmission line alignment.

5) The proposed project must be in compliance with any applicable local flood damage prevention ordinances.

Again, Hollifield testified that the Company would observe and abide by these conditions.

### **III. FINDINGS OF FACT**

1. SCE&G has applied for a Certificate of Environmental Compatibility and Public Convenience and Necessity to construct and operate a new 230kV transmission

line, originating at the SCE&G Yemassee Substation near Yemassee, South Carolina and connecting to the Santee Cooper Yemassee Substation, also near Yemassee, South Carolina.

2. The proposed line will be 2.86 miles in length and will be built entirely on existing SCE&G right-of-way and Santee Cooper property.

3. The Company has established the basis of the need for the line.

4. The impacts of the project on the environment will be minimal, since the proposed line will follow an already-existing right-of-way. The Company has also agreed to comply with all conditions recommended by the State Historic Preservation Office and the South Carolina Department of Natural Resources to further minimize the impact of the construction and operation of the line on the environment. The impact of the line upon the environment is justified, considering the state of available technology and the nature and economics of the various alternatives and other pertinent considerations.

5. SCE&G and the Commission have satisfied all statutory requirements for notice and opportunity for hearing which the Siting Act describes.

6. The line will serve the interests of system economy and reliability.

7. There is reasonable assurance that the proposed line will conform to applicable State and local laws and regulations issued thereunder.

8. The public convenience and necessity require the construction of the line.

9. The requested Certificate for the line should be granted.

#### **IV. CONCLUSIONS OF LAW AND DISCUSSION**

1. SCE&G has demonstrated the basis of the need for the line. Company witness Young testified that the line in question is needed to improve reliability issues in the Yemassee/Hardeville area of the SCE&G transmission system and to interconnect the SCE&G Jasper County Generation project to the SCE&G transmission grid. SCE&G and Santee Cooper worked together to connect the two systems via intertie solutions to address these two needs. Young at 5-6.

2. The nature of the impact of the line on the environment will be minimal, since the new line will follow already existing SCE&G right-of-way. Hollifield at 4. Any potential intrusions into archaeological sites or wetlands will be mitigated by the Company, which has agreed to follow the conditions stated by the State Historic Preservation Office and the South Carolina Department of Natural Resources. Under the conditions described, the impact of the line upon the environment is justified, considering the state of available technology and the nature and economics of the alternative proposal and other pertinent considerations. There is no question but that the potential alternative is much more expensive than the proposed line. The cost of the line as proposed by SCE&G is \$2,250,000, wherein the cost of the alternative line, which would be 80 miles long, would be \$75,000,000. Young at 7.

3. The cost information and comparative costs between alternatives provided by the Company was extremely helpful in making our decision in this matter, as was the transmission study that was provided. In fact, the Company presented the various alternatives in an exemplary manner. The record reveals that SCE&G could have tried to

move forward with a much longer line of more than 70 miles, but SCE&G did not move forward with that scenario. SCE&G presented a very detailed analysis of the proposed line and the alternatives to the proposed line. This analysis was presented in the joint study of SCE&G, Southern Company, Santee Cooper, Georgia Transmission Company, and MEAG, and was submitted with the Application as Exhibit B. This joint study of the alternatives and the costs associated with the various alternatives is consistent with S.C. Code Ann. Section 58-33-160 (1976), which is the statute setting forth what findings the Commission must make in order to grant a siting certificate. The presentation of SCE&G in the instant case sets a new precedent for future siting cases.

Accordingly, we conclude and hold that, for future siting cases, companies shall provide to us the costs of the proposed facility, as well as the cost of the alternatives considered, so that this Commission may fully consider the economics of the alternatives available. We also hold that a company proposing a facility construction shall provide a transmission study that will enable this Commission to make a proper decision as to how the proposed construction fits in with the overall transmission grid.

4. We also conclude that the long-run savings of the proposed line make this line, or this alternative, preferable to other alternatives. While costs of the construction of the alternatives were discussed and presented through study, there are also obvious cost savings, such as maintenance and operating costs, associated with this shorter line than with the various alternatives.

5. The line will serve the interests of system economy and reliability. The combination of the three new interties, including the proposed transmission line, provide

additional power transfer capability for reliability and economic purposes between SCE&G and Santee Cooper. The testimony of Company witness Young also supports the proposition that the new line would allow the two systems to support each other during system contingencies. We agree that the new line is one intertie of a three intertie solution that is the best and the least cost solution for resolving reliability issues in the Yemassee/Hardeville area and interconnecting the Jasper County Generation Project to the existing grid. Young at 5-6. The ability to tie into various substations from the disparate companies interlinks the various systems, provides cross-reliability, and intermingles the systems even more. Further, the line should greatly expand the import and export capabilities of the system between the various NERC subregions, particularly VACAR and the Southern area. Although the proposed line seems small, in that the line is only 2.86 miles long, the reality is that this small line creates and assists in important operational aspects of system economy and reliability.

6. There is reasonable assurance that the line in question will conform to applicable State and local laws and regulations.

7. The public convenience and necessity require the construction of the line. Because the new line contributes to the economy and reliability of the system, and allows the SCE&G and Santee Cooper systems to support each other during system contingencies, we believe that the construction of the line is in the public interest.

8. Because SCE&G has satisfied all of the statutory requirements contained in S.C. Code Ann. Section 58-33-160 (1976), the requested certificate should be granted

**V. ORDER**

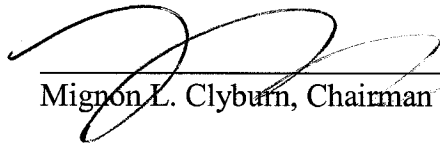
IT IS THEREFORE ORDERED THAT:

1. The Application of South Carolina Electric & Gas Company for a Certificate of Environmental Compatibility and Public Convenience and Necessity be and hereby is approved, and the Certificate is granted.

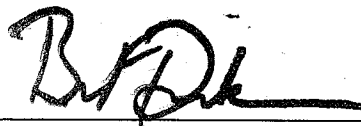
2. In future cases under the Utility Facility Siting and Environmental Protection Act, companies shall provide the Commission with the costs of the proposed facility, as well as the costs of the alternatives considered, so that this Commission may fully consider the economics of the alternatives available. Further, a company proposing a facility construction under the Utility Facility Siting and Environmental Protection Act shall provide a transmission study that will enable this Commission to make a proper decision as to how the proposed construction fits in with the overall transmission grid.

3. This Order shall remain in full force and effect until further Order of the Commission.

BY ORDER OF THE COMMISSION:

  
Mignon L. Clyburn, Chairman

ATTEST:

  
Bruce F. Duke, Deputy Executive Director

(SEAL)